

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

--1. (Currently Amended) A data processing apparatus having a central processing unit and a memory ~~for use in a system, wherein a plurality of modules exist in the memory for access by the central processing unit, with each module having a plurality of components, said apparatus comprising:~~

a memory driver for controlling operations of writing to and reading from a recording medium;

a check point manager unit for communicating between the plurality of components and the memory driver; and

a status storing database unit for storing a dependency relationship ~~between~~ for each component relative to others of the plurality of components, wherein

when a status-storing process is requested by a one component of the plurality of components, the dependency relationship of said one component is read from said status storing database unit and ~~stored data~~ is stored as a snapshot file in said recording medium in a sequence based on the dependency relationship from said status storing database unit; and

when a status-recovering process is requested, a status of said one component is recovered using said snapshot file stored in said recording medium in a the sequence based on the dependency relationship ~~stored in said recording medium.~~

--2. (Previously Presented) The data processing apparatus according to claim 1, wherein said snapshot file includes a tag having one of a name and an identification of said component.

--3. (Previously Presented) The data processing apparatus according to claim 1, wherein said status-storing process and said status-recovering process call a function existing in an address for said component.

--4. (Original) The data processing apparatus according to claim 1, wherein said recording medium is a portable recording medium.

--5. (Currently Amended) A data processing method including a central processing unit and a memory ~~for use in a system~~, wherein a plurality of modules exist in the memory for access by the central processing unit, with each module having a plurality of components, said method comprising the steps of:

controlling writing to and reading from a recording medium, said controlling performed by a memory driver;

communicating between the plurality of components and the driver by using a checkpoint manager;

storing a dependency relationship ~~between~~ for each component relative to others of the plurality of components in a status-storing database;

storing the dependency relationship of a component of the plurality of components ~~and stored data~~ as a snapshot file in said recording medium in a sequence based on the dependency relationship when a status-storing process is requested by the component; and

recovering a status of said component using said snapshot file stored in said recording medium in a sequence based on the dependency relationship ~~stored in said recording medium~~ when a status-recovering process is requested.

--6. (Previously Presented) The data processing method according to claim 5, wherein said snapshot file includes a tag having one of a name and an identification of said component.

--7. (Previously Presented) The data processing method according to claim 5, wherein said status-storing processing and said status-recovering process call a function existing in an address for said component.

--8. (Original) The data processing method according to claim 5, wherein said recording medium is a portable recording medium.

--9. (Cancelled)

--10. (Currently Amended) A storage medium for storing

a software program in a computer-readable form, wherein said software program contains computer software describing a data processing method for execution on a computer system and is stored physically in said computer-readable form; and said data processing method is applied to an apparatus including a central processing unit and a memory ~~for use in a system,~~ wherein a plurality of modules exist in the memory for access by the central processing unit, with each module having a plurality of components, said software program comprising the steps of:

controlling writing to and reading from a recording medium, said controlling performed by a memory driver;

communicating between the plurality of components and the driver by using a checkpoint manager;

storing a dependency relationship among the plurality of components in a status-storing database in a sequence based on the dependency relationship;

storing the dependency relationship of a component of said plurality of components and stored data as a snapshot file in said recording medium when a status-storing process is requested by said component; and

recovering a status of said component using said snapshot file stored in said recording medium in a sequence based on the dependency relationship stored in said ~~record~~ recording medium when a status-recovering process is requested.